IN THE CLAIMS

1 (Currently Amended).   A method for use with a computer system, comprising:

receiving packets of at least two types; and

transmitting packets of one type ~~ahead of~~ before packets of another type that take more time to process.~~, wherein packets that take longer to process are bypassed in favor of packets that take less time to process.~~

2 (Original).   The method of claim 1 wherein said two types of packets include security packets and non-security packets and wherein transmitting packets of one type ahead of packets of the other type involves transmitting non-security packets ahead of packets that are security packets.

3 (Original).   The method of claim 1 including processing said packets in a first in first out memory.

4 (Original).   The method of claim 1 including monitoring an input queue and fetching one type of packet to bypass another type of packet for transmission.

Claim 5 (Canceled).

6 (Original).   The method of claim 1 including receiving packets to be transmitted in a first in first out memory, checking each packet to determine its security status, and providing a pointer to said packet based on its security status.

7 (Original).   The method of claim 6 including organizing a plurality of packets in said first in first out memory as a linked list of packet blocks.

8 (Original).   The method of claim 7 including marking each of said packet blocks in said first in first out memory as being either a security packet or a non-security packet.

9 (Original).   The method of claim 8 including marking packets as security packets or non-security packets depending on the attributes that are indicated in an internet protocol header associated with each packet.

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10 (Original). The method of claim 7 including processing a security packet in an authentication and security engine, and then providing a pointer that points to the security packet.

11 (Original). The method of claim 10 including selecting between pointers to security packets and non-security packets for transmission of said packets from a network controller to a network interface.

12 (Original). The method of claim 11 including selecting from among the pointers based on a round robin priority basis.

13 (Currently Amended). An article comprising a medium storing instructions that, if executed, enable a processor-based system to:

receive packets of at least two types; and

transmit packets of one type ~~ahead of~~ before packets of another type that take more time to process.~~, wherein packets that take longer to process are bypassed in favor of packets that take less time to process.~~

14 (Previously Presented). The article of claim 13, wherein the instructions, if executed, further enable a processor-based system to transmit non-security packets to be transmitted ahead of security packets.

15 (Previously Presented). The article of claim 13, wherein the instructions, if executed, further enable a processor-based system to monitor an input queue and fetch one type of packet to bypass another type of packet for transmission.

Claim 16 (Canceled).

17 (Previously Presented). The article of claim 13 wherein the instructions, if executed, further enable a processor-based system to receive packets to be transmitted in a first in first out memory, check each packet to determine its security status and provide a pointer to the packet based on its security status.

18 (Previously Presented). The article of claim 17 wherein the instructions, if executed, further enable a processor-based system to organize a plurality of packets in a first in first out memory as a linked list of packet blocks.

19 (Previously Presented). The article of claim 18 wherein the instructions, if executed, further enable a processor-based system to mark each of said packet blocks in said first in first out memory as being either a security packet or a non-security packet.

20 (Previously Presented). The article of claim 19 wherein the instructions, if executed, further enable a processor-based system to mark packets as security or non-security packets depending on the attributes that are indicated in an internet protocol header associated with each packet.

21 (Previously Presented). The article of claim 20 wherein the instructions, if executed, further enable a processor-based system to provide a pointer that points to a security packet.

22 (Previously Presented). The article of claim 21 wherein the instructions, if executed, further enable a processor-based system to provide pointers for non-security packets and to select between pointers to security packets and non-security packets for transmission of said packets.

23 (Previously Presented). The article of claim 22 wherein the instructions, if executed, further enable a processor-based system to select among pointers based on a round robin priority basis.

24 (Currently Amended). A network controller for use with a computer system, comprising:

a transmitter coupled to receive packets of at least two different types, one type takes less time to process than another type; and

a dispatcher adapted to determine that said one type takes less time to process than said second type and to transmit packets of said one type ahead of before packets of said another

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type, ~~wherein packets that take longer to process are bypassed in favor of packets that take less time to process~~.

25 (Original). The controller of claim 24 wherein said two types of packets are security packets and non-security packets.

26 (Original). The controller of claim 24 including a first in first out memory adapted to process said packets.

Claim 27 (Canceled).

28 (Previously Presented). The controller of claim 24 including a device adapted to mark packets security packets or non-security packets in said first in first out memory based on attributes indicated in an internet protocol header associated with each packet.

29 (Original). The controller of claim 28 including an authentication and security engine, and a device adapted to provide a pointer that points to security or non-security packets.

30 (Original). The controller of claim 29 including a dispatcher that selects between pointers to security packets and non-security packets for transmission of said packets from said network controller to a network interface.